| Ind                        | ex             | of | Cla   | aiı   | ns    |
|----------------------------|----------------|----|-------|-------|-------|
| <b>1</b> 1 11 11 1 1 1 1 1 | <b>       </b> | mm | 18888 | 11111 | 11111 |

| <br> | <br>.u |  |
|------|--------|--|
|      |        |  |
|      |        |  |

| App | licati | on/C | ontrol | No. |
|-----|--------|------|--------|-----|
|-----|--------|------|--------|-----|

10/777,373 Examiner

Nema O. Berezny

| App | licant | s)/P  | atent | under |
|-----|--------|-------|-------|-------|
| Ree | xamin  | ation | า     |       |

LI ET AL.

Art Unit

2813

Rejected Allowed

(Through numeral) Cancelled

Restricted

Non-Elected N Interference

**Appeal** o Objected

| Cla          | aim      | Date         |  |          |          |  |          | Claim Date |              |          |              |          |          |                 | Claim Date     |         |         |           |  |          |              |  |            |           | $\Box$   |          |          |          |          |          |          |          |  |  |  |   |   |   |   |        |
|--------------|----------|--------------|--|----------|----------|--|----------|------------|--------------|----------|--------------|----------|----------|-----------------|----------------|---------|---------|-----------|--|----------|--------------|--|------------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|--|--|--|---|---|---|---|--------|
|              |          |              |  |          |          |  |          |            |              |          |              |          |          |                 |                |         |         |           |  |          |              | П  |            | $\top$    |          | $\Box$   |          | Т        | 1:::     |          |          |          |  |  |  | T | П | T | Т | $\neg$ |
| Final        | Original | 6/17/05      |  |          |          |  |          |            |              |          |              | Final    | Original |                 | Ì              |         |         |           |  |          |              | Final  | Original   |           |          |          | İ        |          |          |          |          |          |  |  |  |   |   |   |   |        |
| ፲፫           | Ö        | 2            |  |          |          |  |          |            |              |          |              | ΙŒ       | Ö        |                 |                |         |         |           |  |          |              | Œ  | Į          |           |          |          |          |          |          |          |          |          |  |  |  |   |   |   |   |        |
|              | 1        | -            | ┢  | H        | t        | $\vdash$                               | ╁        | +-         | +            | $\vdash$ |              |          | 51       | H               | +              | +       | ╁       | $\vdash$  |  | +        |              |  | 101        | $\exists$ | 十        | $\dashv$ | $\top$   | $\dashv$ | $\dashv$ | $\dashv$ | $\top$   | ᅱ        |  |  |  |   |   |   |   |        |
|              | 2        | V            | 1  | 1        | t        | T                                      | ╁╴       | +-         | +            | $\vdash$ |              |          | 52       | Ħ               | $\neg \dagger$ | +       | ╁       | 1         |  | +        |              |  | 102        |           | 寸        | $\dashv$ | $\top$   | 十        |          | 十        | $\dashv$ | ┪        |  |  |  |   |   |   |   |        |
|              | 3        | V            | ╅┈   | t        | 1        | 1                                      | T        | 1          | 1            | 1        |              |          | 53       | П               | $\dashv$       |         | $\top$  |           |  | ╅        | 1:::         |  | 103        |           | 寸        | す        | T        | 7        | 7        | 1        | 寸        | ヿ        |  |  |  |   |   |   |   |        |
| $\vdash$     | 4        | ~            | ╁  | t        |          | T                                      | $\top$   | T          |              | ╈        |              |          | 54       | Ħ               | 一              | T       | ╅       |           |  | 十一       |              |  | 104        |           | _        | 一        | _        | 7        | 寸        | $\neg$   | 寸        | コ        |  |  |  |   |   |   |   |        |
|              | 5        | ~            | 1  | t        |          |  | T        | ╈          | T            |          |              |          | 55       |                 |                |         |         |           |  |          | 1            |  | 105        | $\Box$    | 一        |          | 1        | 1        |          | T        | 寸        | T        |  |  |  |   |   |   |   |        |
|              | 6        | ~            |  |          | Т        | T                                      | T        | T          | T            | 1        |              |          | 56       |                 | 一              |         |         |           |  |          |              |  | 106        |           | ヿ        |          | T        | Ť        |          | T        | T        |          |  |  |  |   |   |   |   |        |
|              | 7        | ~            |  |          | 1        |  | Т        | Τ          | 1            |          |              |          | 57       | П               |                |         |         |           |  |          |              |  | 107        |           |          |          | T        |          |          |          |          |          |  |  |  |   |   |   |   |        |
|              | 8        | ~            | 1  |          | Г        |  | Г        | T          |              |          |              |          | 58       |                 |                |         |         |           |  |          | ]            |  | 108        |           |          |          |          |          |          |          |          |          |  |  |  |   |   |   |   |        |
|              | 9        |              |  |          |          |  |          |            |              | Ī        |              |          | 59       |                 |                |         |         |           |  |          | ]:::         |  | 109        |           |          |          |          |          |          |          |          |          |  |  |  |   |   |   |   |        |
|              | 10       |              |  |          |          |  |          |            |              |          |              |          | 60       |                 |                |         |         |           |  |          | ] :::        |  | 110        |           |          |          | $\perp$  |          |          |          | ᆚ        |          |  |  |  |   |   |   |   |        |
|              | 111      |              |  |          |          |  |          |            |              |          |              |          | 61       |                 |                |         |         |           |  |          | ]::::        |  | 111        |           | $\Box$   |          |          |          |          |          |          |          |  |  |  |   |   |   |   |        |
|              | 1/2      |              |  |          |          |  | L        |            |              | L        |              |          | 62       | $\Box$          | $\perp$        |         |         | $\Box$    |  |          | <b>[</b> ::: |  | 112        |           | _[       |          |          |          | [        |          | $\perp$  |          |  |  |  |   |   |   |   |        |
|              | 13       | 匚            |  |          |          |  |          |            |              |          |              |          | 63       |                 |                |         |         |           |  |          | ļ::::        | L  | 113        |           | [        |          |          | $\perp$  | _        | $\perp$  | $\perp$  | Ц        |  |  |  |   |   |   |   |        |
|              | 14       |              |  |          | Ĺ        |  | L        |            | L            |          |              |          | 64       |                 | $\perp \Gamma$ | $\Box$  |         | $\Box$    | $\Box \Box$                                      |          | :::          |  | 114        |           |          |          | $\perp$  | $\perp$  | $\perp$  | $\perp$  | $\perp$  | Ц        |  |  |  |   |   |   |   |        |
|              | 15<br>16 |              |  |          |          | L                                      | L        | $\perp$    | ┸            |          |              |          | 65       |                 |                | $\perp$ | $\perp$ | Ш         |  |          |              |  | 115        |           | _        |          | ┙        | _        | _ .      |          | _        | 4        |  |  |  |   |   |   |   |        |
|              |          | _            |  | L        |          | $\perp$                                | L        |            | <u> </u>     | <u> </u> |              |          | 66       | Ш               |                |         | $\perp$ | Ш         | ot   | $\perp$  |              | L  | 116        |           | ļ        | $\perp$  | $\perp$  | 4        |          | $\perp$  | $\perp$  | Ц        |  |  |  |   |   |   |   |        |
|              | 17       |              |  | <u> </u> | L        |  | L.       | 1_         | ┸            | <u> </u> |              |          | 67       |                 |                |         | 丄       | 1         |  |          |              |  | 117        |           | _        | _        |          | _        |          | _ _      | 4        | 4        |  |  |  |   |   |   |   |        |
|              | 18       | L            |  | L        |          | ┖                                      | 丄        | ↓_         | ┸            | ╙        |              |          | 68       | $\sqcup$        |                |         | _       | Li        |  |          |              |  | 118        |           | $\perp$  | _        | $\perp$  | $\perp$  | _        | _        | $\perp$  | _        |  |  |  |   |   |   |   |        |
|              | 19       |              | _  |          | <u> </u> |  |          | $\perp$    | _            | <u> </u> |              |          | 69       | Ш               | _              |         | _       |           |  |          |              |  | 119        |           | _        | _        | _        | _        | _        | _        | $\perp$  | Ц        |  |  |  |   |   |   |   |        |
|              | 20       |              | _  | L.       | <u> </u> | ┺                                      | L        | _          | <u> </u>     | ↓_       |              |          | 70       |                 | _              | _       | $\perp$ | $\perp$   |  |          |              | L  | 120        |           | _        |          | $\perp$  | 4        | _        |          | _        |          |  |  |  |   |   |   |   |        |
| <u> </u>     | 21       | <u> </u>     | L  | <u> </u> | L.       | 1_                                     | ┖        | <u> </u>   | ↓            | _        |              |          | 71       |                 | $\perp$        | 4       | _       | $\sqcup$  | $\perp$  | ļ        |              |  | 121        | $\Box$    | _        | _        | $\perp$  | 4        | _        | _        | _        | 4        |  |  |  |   |   |   |   |        |
|              | 22       |              |  |          | ┖        | ┖                                      | ┸        | _          | 1            | ļ        |              |          | 72       | Ш               | $\rightarrow$  | _       | _       | $\perp$   | $\perp$  | $\perp$  |              | L  | 122        |           | _        | _        | _        | 4        | _        | _        | 4        | 4        |  |  |  |   |   |   |   |        |
|              | 23       | <u> </u>     | <u>_</u>   | L        | L.       | ↓_                                     | ╄        | $\perp$    | ╄            | ↓_       |              |          | 73       | $\sqcup$        | _              | _       | _       | $\sqcup$  | $\perp$  |          |              | <u> </u>   | 123        |           | _        | _+       | $\perp$  | 4        | 4        | _        | 4        | 4        |  |  |  |   |   |   |   |        |
|              | 24       | ldash        |  | _        | ↓_       | ╄                                      |          | ╄-         | _            | _        |              |          | 74       |                 |                |         | ┿       | $\sqcup$  | $\vdash$   |          |              | <b>├</b> ─                                       | 124        | $\dashv$  | _        | _        | $\dashv$ | +        | -        | +        | -        | 4        |  |  |  |   |   |   |   |        |
| L            | 25       | _            | _  |          | ⊢        | $\perp$                                | ╄        | ╀          | _            | ₩        |              |          | 75       | $\vdash \vdash$ | $\rightarrow$  | _       | +       | igspace   |  | +        |              | <u> </u>   | 125        | _         | _        |          |          | +        | 4        |          | +        | $\dashv$ |  |  |  |   |   |   |   |        |
| <u> </u>     | 26       | <u> </u>     | _  | ┞        | <u> </u> | ╀-                                     | ╀        | ╄-         | ╀            | 4—       |              |          | 76       | $\vdash$        |                | -       |         | -         | $\dashv$   |          |              | <u> </u>   | 126        | -         | -        | -        | -        | +        | 4        | $\dashv$ | +        | $\dashv$ |  |  |  |   |   |   |   |        |
| <u> </u>     | 27       | -            |  | ⊢        |          | ⊢                                      | ╀        | ╄          | +-           | ┼        |              |          | 77       | $\vdash$        | -              | +       | ┿       |           | $\vdash$   | +        |              |  | 127        |           |          |          | +        | +        | $\dashv$ | +        | -        | $\dashv$ |  |  |  |   |   |   |   |        |
| <u> </u>     | 28       | ├            | ┝  | ├-       | ⊢        | +-                                     | ╀        | +          | ╀            | -        |              |          | 78       | $\vdash$        | $\dashv$       | +-      | +       | $\vdash$  | $\vdash$   |          |              | ⊢  | 128<br>129 | $\dashv$  | $\dashv$ | $\dashv$ | +        | +        | -        | +        | +        | $\dashv$ |  |  |  |   |   |   |   |        |
|              | 29       | ⊢            | _  | ⊢        | <u> </u> | ╀                                      | ╄        | ╄          | ╁            | ┢        |              |          | 79       | $\vdash \vdash$ | $\dashv$       | +       | +       | ╁╼        | $\vdash$   | +        |              | <u> </u>   | 130        | $\dashv$  | -        | -+       |          | $\dashv$ | -        | +        | +        | $\dashv$ |  |  |  |   |   |   |   |        |
| -            | 30       | ⊢            | -  | ⊢        | ⊬        | ╀                                      | ╀        | ╀          | <del> </del> | ┼-       |              |          | 80       | $\vdash \vdash$ | $\dashv$       | +       | ┿       | +         |  |          |              | ├  |            | $\dashv$  |          | +        | +        | ┿        | $\dashv$ | +        | +        | ᅱ        |  |  |  |   |   |   |   |        |
|              | 31<br>32 | $\vdash$     | ┝  | $\vdash$ | $\vdash$ | ╁                                      | ╀        | +-         | +            | ╁        |              |          | 81<br>82 | $\vdash$        | +              | +       | +       | Н         | $\vdash$   | +        | :::          | $\vdash$   | 131        | $\dashv$  | +        | $\dashv$ | +        | $\dashv$ | $\dashv$ | $\dashv$ | +        | $\dashv$ |  |  |  |   |   |   |   |        |
| <del> </del> | 33       |              | ┝  | ⊢        | ╁        | +                                      | ╁        | +          | ╁            | +        |              |          | 82<br>83 | $\vdash$        | -              | +       | +       | $\vdash$  | $\vdash$   | +        | : :          | $\vdash$   | 133        | $\vdash$  | +        | +        | +        | +        | +        |          | +        | $\dashv$ |  |  |  |   |   |   |   |        |
| $\vdash$     | 34       | ├            | ├  | ┢        | $\vdash$ | +                                      | +        | +          | +            | +        |              |          | 84       | $\vdash$        | +              | +       | +       | Н         | <del>                                     </del> | +        | <b> </b>     | <del> </del>                                     | 134        | $\vdash$  | $\dashv$ | +        | +        | -+       | -        | +        | +        | $\dashv$ |  |  |  |   |   |   |   |        |
| <del> </del> | 35       | $\vdash$     | $\vdash$   | $\vdash$ | $\vdash$ | +                                      | $\vdash$ | +          | ╁            | +        |              |          | 85       | $\vdash$        | +              | +       | +       | $\vdash$  | -  | +        | li i         | $\vdash$   | 135        | $\dashv$  | +        | $\dashv$ | +        | +        | $\dashv$ | $\dashv$ | +        | $\dashv$ |  |  |  |   |   |   |   |        |
| <u> </u>     | 36       | $\vdash$     | -  | ╁        | ╁╌       | ╁╌                                     | +        | +-         | +            | $\vdash$ |              |          | 86       | $\vdash$        | +              | +       | +-      | Н         | $\vdash$   | +        |              | $\vdash$   | 136        | $\dashv$  | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ |  |  |  |   |   |   |   |        |
| <del> </del> | 37       | -            | -  | ┢┈       | +-       | ╁                                      | ╁╴       | +          | +            | +        | <b>:</b> ::: |          | 87       | $\vdash$        | $\dashv$       | +       | +       | Н         | $\vdash$   | +        |              | $\vdash$   | 137        |           | -        | $\dashv$ |  |  |  |   |   |   |   |        |
| $\vdash$     | 38       | -            | -  | $\vdash$ | +-       | $\vdash$                               | ╁        | +-         | +            | ╁        |              |          | 88       | -               | $\dashv$       | +       | +       | Н         | $\vdash \vdash$                                  | +        |              | <del> </del>                                     | 138        | $\vdash$  | ┰        | $\dashv$ | $\dashv$ | +        | $\dashv$ | $\dashv$ | 十        | $\dashv$ |  |  |  |   |   |   |   |        |
| <del> </del> | 39       | ╁╾           | -  | $\vdash$ | +-       | +                                      | +        | +          | +-           | +-       |              |          | 89       | $\vdash$        | +              | +       | +       | $\vdash$  | $\vdash$   | +        |              | <del> </del>                                     | 139        | $\vdash$  | 寸        | $\dashv$ | 十        | $\dashv$ | $\dashv$ | $\dashv$ | 十        | $\dashv$ |  |  |  |   |   |   |   |        |
| <del> </del> | 40       | 一            | $\vdash$   | t        | 1-       | +                                      | ╆        | +          | +            | t        |              |          | 90       | $\vdash$        | 十              | +       | +       | Н         | $\vdash$   | +        |              | $\vdash$   | 140        |           | _        | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | $\dashv$ | 十        | ㅓ        |  |  |  |   |   |   |   |        |
| $\vdash$     | 41       | $\vdash$     | <del>                                     </del> | $\vdash$ | ╁        | +                                      | +        | +          | +            | +        |              |          | 91       | Н               | +              | +       | +       | H         | $\vdash$   | +        |              | $\vdash$   | 141        | $\dashv$  | $\dashv$ | $\dashv$ | +        | $\dashv$ | 十        | 十        | 7        | ᅱ        |  |  |  |   |   |   |   |        |
| <del></del>  | 42       | $\vdash$     |  | $\vdash$ |          | +                                      | +        | +          | +            | $\vdash$ |              |          | 92       | $\vdash$        | +              | +       | +       | Н         | $\vdash$   | +        |              | <del>                                     </del> | 142        |           | $\dashv$ | $\dashv$ | +        | $\dashv$ | _        | $\top$   | $\dashv$ | $\dashv$ |  |  |  |   |   |   |   |        |
|              | 43       | H            | $\vdash$   | H        | +        | $\vdash$                               | +        | +          | +            | $\vdash$ |              | $\vdash$ | 93       | $\vdash$        | $\dashv$       | +       | +       | Н         | -  | +        |              | $\vdash$   | 143        | $\dashv$  | $\dashv$ | $\dashv$ | +        | +        | +        | $\neg$   | $\dashv$ | $\dashv$ |  |  |  |   |   |   |   |        |
|              | 44       | $\vdash$     | H  | t        | 1        | +-                                     | t        | +          | +            | +        | :::i         |          | 94       | $\vdash$        | $\dashv$       | +       | +       | $\vdash$  | -  | +        |              | $\vdash$   | 144        | $\vdash$  | $\dashv$ | $\dashv$ | +        | $\dashv$ | 十        | $\dashv$ | $\top$   | ㅓ        |  |  |  |   |   |   |   |        |
| $\vdash$     | 45       | Н            | $\vdash$   | t        | ╁        | $\vdash$                               | +        | +          | +            | $\vdash$ | 1:::         |          | 95       | $\vdash \vdash$ | $\dashv$       | 1       | +       | Н         | $\vdash$   | +        |              | $\vdash$   | 145        | $\Box$    | $\dashv$ | $\dashv$ | $\top$   | $\dashv$ | 十        | $\top$   | $\top$   | $\dashv$ |  |  |  |   |   |   |   |        |
| $\vdash$     | 46       | $\vdash$     | H  | t        | t        | $\vdash$                               | 1        | +          | +            | +        |              | -        | 96       | $\vdash$        | $\dashv$       | +       | +       | Н         | $\vdash$   | +        | 100          |  | 146        | $\dashv$  | $\dashv$ | $\dashv$ | 十        | $\dashv$ | $\dashv$ | $\dashv$ | $\top$   | $\dashv$ |  |  |  |   |   |   |   |        |
|              | 47       | $\vdash$     | t  | t        | t        | ╁                                      | ✝        | T          | +            | t        |              |          | 97       | $\vdash$        | $\dashv$       | +       | +       | Н         | -  | +-       |              |  | 147        | $\dashv$  | +        | $\dashv$ | $\dashv$ | $\dashv$ | 7        | _        | +        | ヿ        |  |  |  |   |   |   |   |        |
|              | 48       | <del> </del> | $\vdash$   | t        | t        | $t^{-}$                                | T        | T          | 1            | t        |              |          | 98       | $\vdash \vdash$ | $\dashv$       | +       | $\top$  | $\forall$ | <del>                                     </del> | $\top$   |              | <b>-</b>   | 148        |           | 寸        | $\top$   | 十        | 十        | _        | 十        | 十        | $\dashv$ |  |  |  |   |   |   |   |        |
| $\vdash$     | 49       |              | Т  | t        | T        | $\top$                                 | +        | $\top$     | +            | $\vdash$ | 1            |          | 99       | $\vdash$        | $\dashv$       | +       | +-      | $\dagger$ | $\vdash$   | $\top$   | 1            | l  | 149        |           | 寸        | $\dashv$ | 十        | $\dashv$ | _        | 十        | _        | ヿ        |  |  |  |   |   |   |   |        |
| $\vdash$     | 50       | $\vdash$     | $\vdash$   | 1        | t        | t                                      | T        | 1          | T            | 1        | 1            |          | 100      | $\vdash$        | $\dashv$       | +       | T       | $\Box$    | $\vdash$   | $\dashv$ |              | $\vdash$   | 150        | $\exists$ | ┪        | $\dashv$ | $\top$   | $\dashv$ | $\dashv$ | +        | $\dashv$ | ᅥ        |  |  |  |   |   |   |   |        |
| Ь            | _~_      | <u> </u>     |  | 1        | ۰.       | ــــــــــــــــــــــــــــــــــــــ |          | т.         |              |          | 1,           |          |          | ᆫᆜ              |                |         |         |           |  |          | ٠            | Ь—   |            |           |          |          |          |          |          |          | _        |          |  |  |  |   |   |   |   |        |